

## ABSTRACT

A carrier 2 is fixed to one end opening part of a circular cylindrical apparatus main body 1. A plurality of receiving holes 2d, which extend in parallel with a rotation axis L, are formed in the carrier 2 at the same interval in a peripheral direction. A planetary gear 4 is received in each receiving hole 2d such that the planetary gear 4 can rotate on its own axis. An inner gear 5 and a sun gear 9, which are arranged with their axes aligned with the rotation axis L of the apparatus main body 1, are disposed within the apparatus main body 1. The inner gear 5 is engaged with the planetary gears 4 at the outside thereof. The sun gear 9 is engaged with the planetary gears 4 at the inner side thereof. An engagement part between the inner gear 5 and the planetary gear 4 and an engagement part between the sun gear 9 and the planetary gear 4 are displaced from each other in a direction of the rotation axis L so that they are not overlapped with each other in a direction of the rotation axis L.